



Dworshak Fisheries Complex

Monthly Activity Report



November, 2011

U.S. Fish & Wildlife Service, Region 1

Volume 1, Issue 2

Special points of interest:

- Total Fish/Eggs on station at Dworshak: 4,976,068
- Total Fish/Eggs on station at Kooskia: 1,770,010
- New boiler control installation in Mechanical II continued in December.

Inside this issue:

Hatchery Headlines **2-4**

Total Fish on Station **2**

I & E Corner **4**

Maintenance Activities **5**

Administrative Activities **6**

Fish Health Report **7**

Team Member of the Month **8**

Manager's Message....

Another year has passed. It was a successful year. We released several healthy groups of fish last spring and met all our production goals. We have more healthy groups in the hatchery right now for release next spring. Our spring Chinook and steelhead returns in 2011 were good. Our fish contributed to commercial, recreational and tribal fisheries. We had more than enough fish to meet our broodstock needs. We continued to make improvements to hatchery infrastructure. We have a new chiller, more incubators, new pumps and the boilers are

being repaired. Plans are being developed for more improvements in years to come. We saw lots of changes during the last year. More and bigger changes are on the horizon. Every staff member has an important job. This Complex was successful last year because each staff member did their job. We succeed or fail as a team. Our team had a really good year in 2011. I think 2012 is going to be even better.

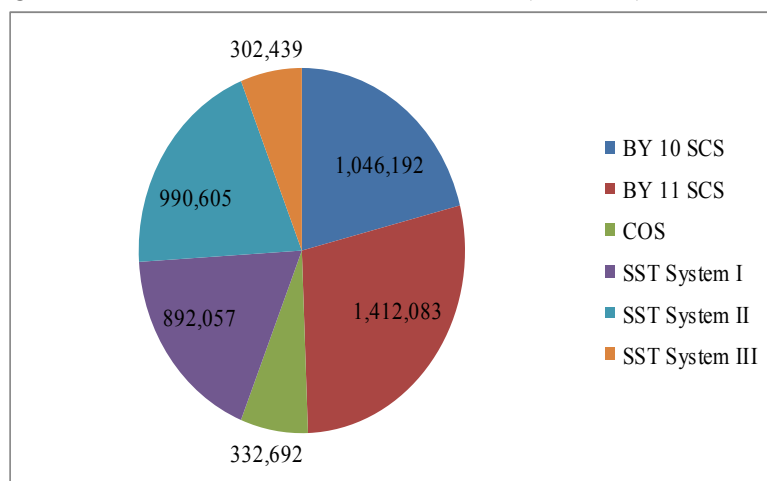
Larry Peltz



Complex Manager Larry Peltz
Credit: USFWS

Production Summary: Dworshak National Fish Hatchery

Figure 1. Total Production—Fish on Station (11/30/11).



BY11 Chinook sac fry.
Credit: Angela Feldmann/USFWS

SCS=Spring Chinook; COS= Coho; SST= Steelhead





A returning steelhead makes the final leap up the fish ladder.

Credit: Angela Feldmann/USFWS

"The new chiller continues to be fine-tuned to delay development of SCS fry to allow for feeding to begin in April, 2012."



Rob Bohn checks SCS raceways for moribund fish.

Credit: Angela Feldmann/USFWS

Hatchery Headlines: *Dworshak Spring Chinook Salmon (SCS)*

Brood Year 2010 (BY10)

At the end of the month there were 1,046,192 BY10 SCS on station averaging 29 fish per pound (fpp) and 124 mm (4.9 inches) total length. Mortality for the month averaged 0.05 percent and water temperature averaged 45.1°F in the raceways (RWs).

Brood Year 2011 (BY11)

All four egg-takes have hatched by the end of the month. There were 1,412,083 BY11 SCS sac-fry in A and B-bank incubators. Mortality for the month averaged 0.3 percent and water temperature averaged 36.9°F. The new chiller continues to be fine-tuned to delay development of these fry to allow for feeding to begin in April, 2012.

Hatchery Headlines: *Dworshak Summer Steelhead (SST)*

Brood Year 2011

At the end of the month there were a total of 2,185,101 BY11 SST on station in the BPs averaging 10 fpp and 169 mm (6.7 inches) total length. Mortality was 0.1 percent for the month and temperature averaged 45.3°F in System I (reservoir water blended with river water) and 45.1°F in Systems 2 and 3 (river water).

Brood Year 2012

The ladder was operated at the middle and end of the month and 124 adult SST were added to holding pond one to represent the early returning adults. There were also 60 SST collected for *Infectious Hematopoietic Necrosis Virus* (IHNV) sampling and 115 for tagging and recapture in the spring of 2012. There were also 42 coho and two fall Chinook salmon captured and out-planted. Carcasses from fish used for IHN sampling were donated to a local food bank. Spawning of BY12 SST will begin in January 2012.

Hatchery Headlines: *Dworshak Coho Salmon (COS)*

Brood Year 2010

At the end of the month, there were 332,692 on station in RW's 16-21 averaging 33 fpp and 112 mm (4.4 inches) total length. Mortality for the month averaged 0.07 percent and water temperature averaged 45.1°F.

Total Fish on Station: *Dworshak, 12/31/2011*

SP	BY	Location	Number	Wt (lbs)	FPP	L in	L mm
SCS	10	RWs 1-15; 22-30	1,046,192	36,575	29	4.9	124
SCS	11	Incubation Trays	1,412,083	650	Sac Fry	Sac Fry	Sac Fry
COS	10	RWs 16-21	332,692	10,063	33.1	4.4	112
SST	11	System I	892,057	67,638	13.2	6.0	153
SST	11	System II	990,605	120,504	8.2	7.0	179
SST	11	System III	302,439	38,380	7.9	7.1	181
SST	11	SST on feed Tot/Ave	2,185,101	226,522	9.6	6.7	169
Total Fish/Eggs on Station EOM			4,976,068	273,810			

Hatchery Headlines: *Kooskia*

Kooskia NFH Monthly Activity Report: December, 2011

This activity report is implemented by the Tribal Fish Hatchery manager, Kent Hills. All information in this report was collected and performed by the hatchery staff during the preceding month.

Past Activity Reports have only included Spring Chinook Salmon (SCS) because they are the required mitigation species for which KNFH was constructed. Under SRBA and the Clearwater Annual Operating Plan, the Tribe, Service and Idaho Fish & Game have agreed to implement other fish production actions related to KNFH mitigation. Future reports will include additional information about other species reared, processed and released in relation to KNFH operations; e.g., Coho, Steelhead, and other spring Chinook stocks.

Kooskia Coho Adult Trap Operations Brood Year 2011

Adult Coho trapping was terminated on December 8, at the Kooskia trap.

Kooskia Coho Brood Year 2011

Egg take one started with 171 females being spawned. Eggs from 12 females were culled due to disease or poor fertilization. Eggs from 162 females were shocked by Mike Bisbee's crew on December 13, and enumeration started on the 19th. Art and Kent finished enumerating take one on Dec. 20th. Total eggs are 454,956, good eyed eggs are 388,230, and bad eggs are 66,726. The percent eye-up was 85.3% and the average fecundity was 2,861. Eggs were enumerated into approximately 5,000 per tray. We now have seventy eight trays of eyed eggs. Egg take 4 consists of eggs from 33 females. These eggs will eye-up the first part of January. On December 28, a single tray of eggs from one female that wasn't taken from DNFH to Eagle Creek Fish Hatchery were transported to the

Kooskia NFH for incubation.

Kooskia Chinook Brood Year 2010

Number of fish on station at the end of the month was 627,196 juvenile Chinook with an average size of 31.3 fpp at 4.74 inches (120 mm) length. The fish have lost some size this month due to frozen ponds and decreased feeding. Total feed consumed for the month was 560 lbs. Mortalities for the month totaled 609. Monthly Pathology evaluation shows that food was present in all fish sampled; low levels of *Sanguinicola* were found on the gills and moderate levels of external skin *Epistylis* and *Amphiphysa*. Clear Creek temperatures have dropped to 36° F for a high and the low during the month was 32° F.

Kooskia Chinook Brood Year 2011

The egg incubation chiller operated without problems the whole month at temperatures between 38 to 41°F. Egg



Kooskia NFH is owned by the USFWS and managed by Nez Perce Tribal Fisheries.
Credit:USFWS

takes two, three, and four were in the sack fry stage for the month. All trays were cleaned of egg shells and dead fry. Numbers for each lot can be seen on the table below.

KNFH 2011 SCS Data

Take	Total eggs	Eyed eggs	Sac Fry	Picked after hatch	Percent Sac Fry
2	186,246	177,570	172,353	2,368	92.5%
3	406,163	386,458	379,681	4,252	93.4%
4	172,137	165,448	164,043	1028	95.3%
Total	764,546	729,476	716,077	7,648	93.66%



A close up look at a new boiler control panel in Mech. II

Credit:USFWS

"288 visitors from 8 countries visited the Dworshak Blog in December."



Harley Wiese drawing the winners for the CFC raffle.

Credit: Angela Feldmann/USFWS

Information and Education Corner

Dworshak

Stats: Tours-1, 4 people from the COE Rehab Team; Register- 58 visitors from 7 states, two countries; Website visitors- 70 page hits logged between 12/29-12/31; Blog Visitors- 288 from 8 countries! Total Contacts- 18.

On Site:

Lou Ann Lasswell organized a raffle to help raise money for the CFC. On Dec. 9th, 2011 we finalized our raffle, with the fun-loving Miss Harlie Wiese drawing the lucky winners. Mr. Dave Trainor was drawn for a Toshiba T.V., for which he also donated, thank you Dave. Lou Ann Lasswell was drawn for the Microwave, which was generously donated by Wayne Hamilton, thank you Wayne. Mr. Ben Greene was the lucky winner of the \$50.00 gas/gift card from Nez Perce Express (Exxon), donated by Mr. Ed Larson and Lou Ann Lasswell, thanks to all who donated items, for which this raffle was possible. Mr. Randy Bowen was the winner of the Happy Meal gift card for selling the most tickets. Thanks to everyone who participated or supported in some fashion, together we raised \$86.00 for the CFC fund. Great job!!! It's a win,win, for everyone.

There were four articles posted to Dworshak Fisheries Complex Blog. Please visit the site: [The Fish Ladder: Notes from Dworshak Fisheries Complex](#), and feel free to contribute! A big Thank You goes out to Blog contributors Nate Wiese and Larry Peltz!

I continued working with Aron Jackson, TESLA Science Resource Teacher, and Tim Cochnauer to expand his existing Hatchery in the Classroom (HIC) program from McSorley elementary school. There are 7 Lewiston area schools signed up for the program and 2 more schools pending. Two 4th grade classrooms at Palouse Prairie Elementary in Moscow will also be participating in the HIC program!

Randy Bowen has set up a web analytics account with statcounter.com to log visitors to the Dworshak NFH home page (see stats above). Angela is using Google analytics to track blog visitors. As always Randy and I updated Complex website content.

As we make preparations for steelhead spawning I coordinated volunteers to help with spawning efforts.

Kooskia

Hatchery personnel are trying to keep count of visitors to the grounds. There were approximately 65 visitors for the month by the manual count.



Maintenance Activities

Dworshak

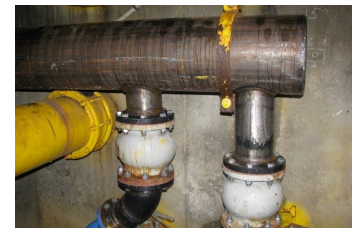
This month Metal Benders continued with the installation of the new boiler controls. It was a busy month with work being completed on the incubation project and many smaller electrical jobs being tackled. Temporary repairs were made to the Fish Health roof to stop leaks while the COE pursues moisture surveys and complete roof replacement in the coming budget cycle.

Other activities included:

- Completed new incubation headers chilled and cold line.
- Completed new incubation formalin lines.
- Installed Chiller Circulation pump VFD.
- Installed flow meter on chilled incubation line.
- Installed new chiller condenser circulation pump.
- Repair Chinook crowders with SS 1/4" mesh.
- Pulled out and repaired small channel crowders.
- Repaired Large Crowder 480 SO Cord.
- Repaired wiring for Sys I exhaust fan.
- Installed Main Aeration heat tape permanent wiring.
- Installed new Warehouse West Freezer Outlets.
- Replaced sump pump in pipe vault.
- Repaired Housing Area Light.
- Mechanical I air compressor #2 PM performed.
- Chevy Trailblazer serviced.
- New HVAC unit installed in Maintenance Office.
- Repaired leaking roof drain in Fish Health Building.
- Made temporary repairs to leaking Fish Health Roof.
- Replaced old breaker panel in Fish Health Building.



Jerry determining the domestic well water level at Kooskia.
Credit: Kent Hills/NPT



Manifold fabrication for inside incubation water return at Kooskia NFH.
Credit: Kent Hills/NPT

Kooskia

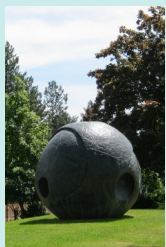
- Dec 07: Adjusted hatchery water flows from Clear Creek to winter use levels. Then tested the hatchery alarm system to make sure everything was operating properly.
- Dec 08: Coho trapping was finished, the trap was closed and water was diverted around the trap and the blocking screen was installed.
- Dec 09: The UV filters were replaced in the Hatchery Manager's house.
- Dec 12: Installed new flow switches on the back-up chiller.
- Dec 15: Ken from Avista visited the hatchery to evaluate the domestic well project and to provide information on the power options for the new well house.
- Dec 19-20: Picked and counted Coho eggs from take 1.
- Dec 21: Gateway was at the hatchery and performed the manifold fabrication work on the inside nursery pumps. The install was checked for leaks by opening the valve to the Biofilter. The electrical will be completed in January.
- Dec 23: Call out alarm for low water at 3:00 a.m. We had to adjust the flows in the Burrows Ponds.
- Dec 23: Jerry and Kent measured the domestic well level for Brockway Engineering.
- Dec 27: Finished work on the Coho Spawning protocol for the KNFH.
- Dec 29: Power failure alarm 2:50 a.m. All personnel were called in.



System I Burrow's ponds.
Credit: USFWS



Great Blue Heron tracks.
Credit: Nate Wiese/USFWS



Egg sculpture, DNFH
Credit: USFWS

Meetings....Training....Travel

Dworshak

- 12/1 Larry Peltz, Mark Drobish, and Nate Wiese participated in a COE Rehab Team economics meeting; Larry Peltz and Ed Larson met with COE officials and railroad officials to discuss the feasibility of an at grade crossing for the hatchery in lieu of the bridge
- 12/9 Larry Peltz and Adam Izbicki traveled to Walla Walla for a COE Rehab Team.
- 12/10-12/17 Angela Feldmann traveled to NCTC for the FWS Employee Foundations course.
- 12/14 Several staff participated in an AOP meeting on site.
- 12/22 The monthly Snake River Basin Adjudication (SRBA) coordination meeting was held at the Nez Perce Tribal Fisheries Office in Lapwai. Larry Peltz, Mark Drobish, Nate Wiese attended the meeting.

Kooskia

- 12/5 Kent Hills attended a meeting with Joan George at DNFH on Kooskia NFH budget.
- 12/6 Larry Peltz and Adam Izbicki participated in conference call to discuss domestic water system at Kooskia Hatchery.
- 12/14 Meeting at DNFH
- 12/20 SRBA meeting at DNFH

Administrative Activities

Currently the Admin. staff are going through a huge transfer of budget and purchasing trying to update over 5 months of data.

Safety

There were no safety actions to report in November.

Personnel Actions –

Dave Trainor retired in December.

Staff Service Anniversaries and Birthdays

Years of Service

There were no years of service anniversaries in December.

December Birthdays

Jill Olson



Idaho Fish Health Center

Complex Hatcheries

Kooskia: Guppy visited on 12/13 for monthly monitoring and took samples for BKD monitoring by ELISA.

Dworshak: Several ponds and raceways were treated this month for parasites, primarily for Trichodina. These included BPs 48 and 63 examined by Liz on 12/9, BPs 60, 46, and 49 by Liz on 12/13, and BPs 46 and 60 by Corie on 12/28.

New SST adults from the river were sampled for IHN virus on 12/1, 12/15, and 12/29 by Liz, from 30 fish on each date. Laura and Liz helped with GnRH hormone injections for SST male adults under an INAD on 12/20.

Guppy performed monthly monitoring for SCS at Dworshak on 12/13. Samples were taken for BKD monitoring by ELISA.

NEZ PERCE TRIBE: The Tribe continued to treat for ICH. Guppy visited on 12/1 for recheck of effectiveness of the formalin treatments. Laura will re-check in January.

Corie performed monthly monitoring for NPT Coho at Dworshak on 12/15 and 12/21. Light parasites, algae, and debris were seen on both days. Gas Bubble disease was seen on 12/21 only. Bacteriology was positive for Cold Water Disease from one sample from an eye. Confirmation by PCR is pending.

Bacteriology: Samples were received from NPT COS at Dworshak. One sample from an eye was presumptively positive for Cold Water Disease, pending PCR confirmation.

Virology: Corie had 103 new samples for virus and also ran 235 blind passes.

PCR: Laura and Chelsea have started extracting for R.sal confirmation.

ELISA: Guppy assayed 128 kidney samples for BKD by ELISA for NPT FCS on 12/5-6.

Other:

Laura was on A/L for three weeks in December

Corie, Laura, and Guppy conducted 6 interviews for term job announcement on 12/15.

Laura and Guppy participated in an all FHC conference call on 12/5.

Volunteer, Betsy Koncerak, assisted the IFHC on 12/6.

Guppy participated in conference call of committee reviewing requested changes to the sampling chapter of the FWS-AFS Bluebook Inspection Manual on 12/6.

Guppy participated in conference call of committee to update the USFWS National Aquatic Animal Health Policy on 12/7.

Guppy attended RO PL conference call on 12/12.

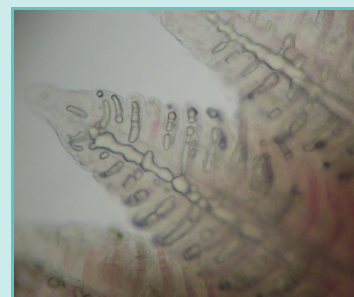
Guppy attended steelhead spawning HET meeting on 12/13.

FWS National Aquatic Animal Health Coordinator Joel Bader visited the Idaho FHC on 12/14.

Guppy participated in the Clearwater AOP meeting on 12/14.

End of year reports were submitted to LSRCP, NPT FCAP, and BY 2000 report for DW FRO.

Last day for temporary hire Kristi McGehee with the IFHC was 12/23.



Gill tissue showing heavy Gas Bubble disease.
Credit: USFWS

Staff List

Complex Management

Larry Peltz, Complex Manager
Ed Larson, Nez Perce Tribe Co-Manager
Mark Drobish, Hatchery Manager
Nathan Wiese, Assistant Hatchery Manager
Jack Christiansen, Aquatic Engineer

Dworshak Production Staff

Thomas Trock, Mark Bright, Angela Feldmann, Jill Olson, John Vargas, Rick Allain, Rob Bohn, Wayne Hamilton, Ben Wright, Clarice Holt

Nez Perce Tribe Production Program

Mike Bisbee, Tuianna Moliga, Lou Ann Lasswell, Steve Coomer, AJ Sisto, Paul Eneas

Administration

Joan George, Penny Hasenoehrl

Maintenance

Adam Izbicki, Ben Greene, Terry Weeks, Rick King, Brent Goosen, Rob Kellar, Gerald "Scooter" Stretsbery

Idaho Fish Health Center

Dr. Marilyn Blair, Liz Steiner, Laura Sprague, Corie Samson

Idaho Fishery Resource Office

Howard Burge, Mike Faler, Dr. William Conner, Ray Jones, Aaron Garcia, Carrie Bretz, Frank Mullins, Tom Biladeau, Dr. Chris Peery, Jody Brostrom, Randy Bowen, Steve Bradbury

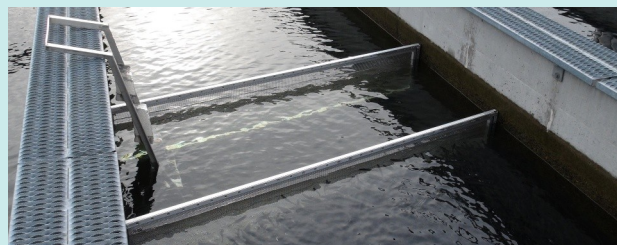
Kooskia National Fish Hatchery

Kent Hills, Art Broncheau, Kenny Simpson, Gerry Fogelman



Nez Perce Tribe and Dworshak NFF Production, Maintenance, and Administrative staff.

Credit: Angela Feldmann/USFWS



Team Member of the Month: Dave Trainor

We gave a fond farewell to Maintenance employee Dave Trainor as he retired after over 20 years of service with USFWS December 30th. Dave's skill as a welder can be seen throughout the facility. Some of the major contributions Dave made during his time here are: fabrication of crowding screens for the raceways and burrows ponds (see photo above), installation and repair work to vacuum degassers for the SCS raceways, fabrication of countless tables, brackets, and racks for equipment, signage and supplies, fabrication of a trailer to house our fish counter.

We will miss Dave's good nature, creativity, and hard work and wish him luck in his future endeavors!



Dave standing next to some of his handiwork.

Credit: USFWS